C L A I M S

1. A method for gasification of a solid carboneous feed, wherein said gasification is performed in an elongated gasification reactor vessel comprising a gasifier unit, a co-axial positioned cooled channel through which the dust-loaded hot-gaseous product of the gasifier unit is discharged from the reactor, and means to supply a quench gas to the dust-loaded hot gaseous product at a position downstream of said gasifier unit, wherein to an annular space between the reactor vessel wall and the cooled channel a dust-free gas is supplied at a rate sufficient to ensure that no dust-loaded hot gas will flow from the cooled channel to said annular space.

2. Method according to claim 1, wherein the pressure in the annular space is equal or higher than the pressure in the cooled channel.

3. Method according to any one of claims 1-2, wherein the temperature of the dust-free gas is between 200 and 350 °C.

4. Method according to any one of claims 1-3, wherein the dust-free gas is part of the gaseous product of the gasifier unit from which dust has been removed downstream said gasification reactor.

5. Method according to claim 4, wherein the dust-free gas is part of the quench gas.

6. Method according to claim 5, wherein the means to supply quench gas is provided with gas discharge openings to supply quench gas to the cooled channel and gas discharge openings to supply quench gas to the annular space.

7. An elongated gasification reactor vessel comprising a gasifier unit, a co-axial positioned cooled channel through which the dust-loaded hot-gaseous product of the gasifier unit is discharged from the reactor, and means to supply a quench gas to the dust-loaded hot gaseous product at a position downstream of said gasifier unit, wherein also means to supply a dust-free gas to an annular space between the reactor vessel wall and the cooled channel is present.

8. Reactor according to claim 7, wherein the means to supply quench gas is provided with gas discharge openings to supply quench gas to the cooled channel and gas discharge openings to supply quench gas to the annular space.